SECTION 2: THE STATUS OF IMPLEMENTATION

This section provides an overview of the current status of the implementation of TOD, both in the United States and within California, including region-by-region reviews. Twelve "profiles" of actual TODs in California are also provided.

CHAPTER 4: What is the Status of Transit-Oriented Development in America?

CHAPTER 5: How and Where is TOD Being Implemented in California?

TrizecHahn Ehrenkrantz Eckstut & Kuhn Architects

'Hollywood/ Highland' - a major new mixed-use TOD featuring retail, entertainment, and lodging over a Red Line subway station - is described in a "TOD Profile" in Chapter 5.

CHAPTER 4: What is the Status of Transit-Oriented Development in America?

Principal Authors of Chapter: GB Arrington and Topaz Faulkner

I. Introduction

This chapter is based on a review of TOD implementation at the major urban rail passenger systems outside of California within the United States. It starts with a general review of some of the issues and trends surrounding TOD, (such as ingredients for success and major barriers) and ends with a review of several notable TODs in America. (Detailed system-by-system "snapshots" of TOD planning and implementation in America are included in the separate Appendix to this report.)

Parsons Brinckerhoff

A Successful TOD, like Collins Circle in Portland, Oregon, starts with the consideration of TOD in the design of the transit system

(The appendix to this report provides a detailed transit system-by-system review of the policy framework for TOD, the status of TOD implementation, and highlights and related key issues.)

A TOD "Renaissance"

A number of transit-oriented developments have been built or are underway in metropolitan areas throughout the United States. More so than at anytime in recent history there is heightened interest in, planning for and implementation of, TOD. A variety of factors appear to be at play, including:

- Escalating traffic congestion is increasing the attractiveness of inner city sites and suburban locations that are close to rail transit. [112]
- Rising land values in many communities are creating the economic conditions necessary to help make mixed-use compact development feasible.
- The increased trend of Americans moving back into the core of cities makes these areas more attractive places for investment. [113]
- Demographic changes underpin an expanding market for higher-density mixed-use communities.
- Nationwide, support for 'smart growth' is at record levels. In a September 2000 poll, nearly 8 out of 10 Americans indicated that they support smart growth and the strategies necessary to implement it. [114]

- There have been recent significant changes in Federal Transit Administration policies for 'joint development', and an emphasis on transit-supportive land use in Federal funding for new rail starts.

- More transit agencies are starting to realize they are in both the "community building" and the "people moving" businesses.

The strength of the real estate cycle over the past few years appears to have been more important in accelerating the implementation of TOD than was supportive public policy. (See Chapter 6 for a more complete discussion of this topic.)

However, to better achieve broader implementation of TOD, transit-friendly public policy[LVI] will be essential to help shape what happens in the next real estate cycles. Additionally, for long-term success, the link between public policy and TOD will need to be strengthened.

Key Ingredients for Success
Based on this assessment of TOD implementation in America, it is possible to propose some broad conclusions on the practice of TOD that could be applied to California. A recipe for successful TOD implementation is made up of several parts:

- Transit system design,
- Community partnerships,
- Understanding real estate,
- Planning and,
- Providing the right mix of incentives to make TOD work.

The communities that have been the most successful with TOD are those that have taken a proactive approach with each of these activities. They also tend to be communities that have a large toolbox of supportive planning and financial incentives.

The primary proponents of successful TOD implementation have often been local jurisdictions. Cities and counties in California have the necessary tools to encourage TOD, including: planning, zoning, and - in some areas - redevelopment authority.

Even so, the barriers to achieving the higher-density, mixed-use, walkable design necessary to realize the promise of TOD are both real and considerable. There is frequently a large gap between the desire for TOD and the reality of what is allowed and built in local plans. Most jurisdictions that have existing or planned rail systems do not have transit-friendly zoning or development plans in place around stations. This remains a major barrier to TOD implementation.

Success with TOD starts in the design of transit systems – selection of corridors, station locations, and the design of transit facilities. Recently there has been a stronger early emphasis on TOD in both the design and implementation of new

[LVI] Policies which focus growth into transit corridors, and clear development entitlements to allow higher-density, a mix of uses and development at higher densities.

transit systems. After their first experience with TOD, some transit operators are learning that TOD needs to be undertaken earlier in the planning and design process. Early efforts appear to be paying off in each of the systems that have already implemented TOD.

II. Lessons Learned

Early Action is Essential for Successful TOD

Over the past 25 years, there has been a pronounced shift in the planning for and implementation of TOD in America. Planning for TOD had not been a strong focus of many new rail starts. In the 1970s and 1980s, Washington, D.C., Atlanta, Georgia, Miami, Florida and Portland, Oregon prepared station area plans as part of the development of their transit systems. However, except for Portland and a few stations in Washington, D.C., the plans generally were not used to guide or shape development around stations.

Recently there has been a stronger early emphasis on TOD in both the design and implementation of new transit systems. For example, Portland's 18-mile Westside light-rail project, along with its 5.5-mile Airport line, were largely justified and designed with TOD in mind (see Portland description later in this chapter). Transit operators are starting to learn from their initial experience that TOD planning is something that needs to be done earlier in the project development process. Denver, Dallas, St. Louis, Salt Lake City, Portland, San Diego, San Jose, and Sacramento, are all examples of transit systems with new rail extensions that increased their TOD efforts well after their first line was already in place. Each of these systems gave more early attention to TOD with their extensions, than with their starter line. And, in each of those systems those early efforts appear to be paying off.

The lesson for communities interested in a future with more transit-oriented development is straightforward. In order to succeed with a TOD strategy, they need to start TOD planning much earlier in the project development process.

Decisions on alignment, where to locate transit stations, and the layout of transit facilities all can make a huge difference between a successful or unsuccessful development strategy. More times than not, these decisions are made without any effective consideration of future transit-oriented development. Furthermore, repairing the problem after the fact is costly, time-consuming and difficult.

Solving problems early on means bringing an expanded cast of characters to the table. Engineers and transit planners designing transit systems need to work with real estate economists, architects, landowners, residents and land use planners.

'Value Capture'

In the 1970s, the Federal government advocated TOD as a means to help pay for the

construction of new rail systems – the term then was 'value capture'. For a variety of reasons the theory and practice of 'value capture' never seemed to materialize. The challenge of trying to put together complex multi-party funding packages was often a greater hurdle than simply seeking more Federal funding for a new rail project. However, transit 'joint development' (involving the use of property acquired as part of a transit project) is used for development, has been increasing in the past several years. (Please see Section IV of this chapter for more information on the topic of Joint Development.)

Recently, there has been a reduction in the Federal percentage share (from 80/20 to 50/50) for new rail projects and significantly increased competition from a record number of rail proposals in the 'new starts' pipeline. As a result, the motivation to consider value capture has started to change.

Thirty years after the Federal government first started promoting the concept of value capture, there are finally some examples where TOD is playing a major role in the financing of new transit facilities. Three examples highlight this trend:

Portland, Oregon: The financing package of Portland's Airport light rail extension is built around TOD. Bechtel Enterprises is contributing $28.3 million toward the $125 million light rail project. In return, Bechtel, in partnership with Trammell Crow, will develop a 120-acre transit-oriented development with office, retail space, and hotel uses called *CascadeStation* at the entrance to the airport.

San Francisco Bay Area: The Bay Area Rapid Transit District (BART) is working on a TOD at the West Dublin BART station that will result in the private development of transit facilities, including the BART station, parking structure, and pedestrian bridges. The complex financing structure will help transform a 17-acre site that was initially acquired for BART parking into a mixed-use high-density TOD.

Southern California: The Pasadena 'Blue Line' light rail project is rounding out its financing package with the development of excess project right-of-way. From this, the Pasadena Construction Authority expects to realize a $30 million dollar contribution to the capital cost of the project.[115]

These projects each are in response to unique local conditions, but they also help demonstrate that TOD is starting to transform how we think about the financing and definition of transit. With the right project and market conditions, 'value capture' is a strategy that can provide benefits as part of transit 'joint development' projects. More information is provided on this topic in section IV of this chapter.

III. The Next Generation of TODs

In addition to what is happening with systems that have operating rail lines, it is helpful to look at new rail systems in America.

Because of their innovative early TOD work, some new transit systems to watch include:

Hiawatha Corridor, Minneapolis, Minnesota -
The City of Minneapolis and the Metropolitan Council have undertaken a program to plan for and implement TOD as part of the light rail project. Their approach is noteworthy in that they have targeted a handful of station areas for detailed TOD master plans rather than undertaking planning for the entire corridor.

City-led TOD master plans for one-half mile around stations are underway for Lake Street, Cedar/Riverside and Franklin, 46th Street and a 'multi-modal' station in downtown Minneapolis. Up to $9 million has been set aside for TOD planning and land assembly. The funding is a combination of urban renewal funds from the City of Minneapolis and Federal Congestion Mitigation Air Quality (CMAQ) funds.[116] (For information on funding options for TOD, see Chapter 7. Also, the Appendix volume to this report provides additional detailed information on funding sources.)

Sound Transit, Seattle, Washington -
A strong real estate market in Seattle, along with a collaborative TOD planning process with local governments and some early seed funding for TODs, are putting all the key fundamentals for a successful TOD strategy into place. The City of Seattle has established a Station Area Planning Team to lead the process of developing new land use plans in the areas around Sound Transit light rail stations.

Station Area Overlay districts for eight stations were adopted in July 2001 "to discourage auto-oriented development and increase opportunities for housing near transit corridors where light rail stations are proposed."[117]

Charlotte Area Transit -
The City of Charlotte/Mecklenburg County, North Carolina, has a broad regional policy framework in place to link transit and land use with its "2025 Transit/Land Use Plan". Their 'centers and corridors' land use strategy is organized around major transit investments in five transportation corridors. Charlotte now faces the hard choices required to make the vision real.

Duany Plater-Zyberk

'Cornelius' in suburban Charlotte, N. Carolina

Four towns are clearly aware of these points and do not want to squander the chance to concentrate people and jobs.[118] Although train service is at least five years away, the towns are already buying land and encouraging developers to build dense new neighborhoods near the tracks. In some cases, towns have

adopted temporary moratoriums on non-TOD new construction along the line. Others have adopted innovative land use and development rules that allowed the construction of transit-friendly villages like Cornelius and Vermillion where streets connect to make access easy.

The key lesson in each of these examples is the strong involvement of both the city and the transit agency. TOD is not something transit agencies typically have successfully accomplished without partnerships.

Let the Market Decide?

Dallas, Texas is an interesting example of where market factors, rather than supportive public policy, are leading to development next to transit. Since the opening of the Dallas Area Rapid Transit (DART) light rail system in 1996, *The Dallas Morning News* reported that more than $800 million in new commercial and residential investment has either been constructed or is in process of being built within walking distance of the DART line. [119] This has happened without subsidies, TOD planning, or supportive policies by the regional planning agency, the City of Dallas or DART along the starter line. Other than the Cedars Project, there has been virtually no public TOD subsidy in Dallas.[120]

While there has been a lot of development next to DART stations, it is largely "transit adjacent" not "transit-oriented." Development has not been shaped by transit, partially because TOD is technically 'illegal' in Dallas. In other words, the zoning and development code in the City of Dallas does not allow development to occur in a different manner because of its proximity to transit. In some instances, even when the market wants to respond to transit in Dallas, it is not allowed to. For example, the developer of Dallas's "Mockingbird Station" believes he had to build $6 million worth of additional structured parking in the project because of the City's refusal to reduce the parking requirements for the project to reflect lower parking demand due to its location next to a DART station.[121]

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Gatalvn Park Station. Richardson Texas

While until recently the City of Dallas has not conducted TOD planning, Dallas's suburban communities of Garland, Richardson and Plano are leading the charge with new TOD plans along DART extensions that are under construction. The challenge for Dallas along with the rest of the country is whether the next real estate market cycles will be as accommodating to TOD as in the late 1990s. Furthermore, without supportive public policy, will DART stations be favored locations for development? (For more information on Dallas TOD see the profile in the separate appendix to this report)

Transit System Parking or TOD?
Is the land around transit stations best used for commuter parking or building communities? Determining an answer to that question continues to create a dynamic tension in transit systems across the country. The long-term goal of 'community building' and the essential short-term goal of maximizing ridership are often put in conflict with each other.

The compromise offered by many transit managers is to use commuter parking as land for development. In theory, as the TOD development market matures, the surface parking lots can be "harvested" as land for TODs. In reality, however, the theory has rarely worked due to the difficulty of taking parking back from existing park-and-ride patrons (who often view the parking as their vested right). Indeed, the collective voice of existing park-and-ride patrons is always louder than the voice of future residents. (For an example of a TOD created from a park-and-ride lot, see the Ohlone-Chynoweth profile in Chapter 5.)

Designing transit systems for commuter parking often has resulted in a transit station platform surrounded by a sea of commuter parking. That has limited the opportunity for TOD in a number of important ways: First, the parking separates the transit system from the adjacent community along with potential TOD parcels. Second, the parking creates an automobile oriented environment, rather than the pedestrian environment that is essential for transit-oriented development. Third, the need for significant parking leads to locating stations in locations that are not conducive to TOD. Finally, regulatory requirements for replacement parking in some places limit the possibility of converting commuter parking into TODs.

Washington, D.C. and Maryland Metropolitan Transit Agency are fairly typical of the dilemma TOD planners face. The primary function of many suburban stations is to provide commuter parking for transit riders. Under their procedures, surface parking can only be used for TOD if commuter parking is replaced on a "1:1" basis.

The cost of replacing parking spaces in order to allow for development becomes a TOD requirement, not a transit system requirement. In other words, the TOD must develop enough revenue to replace surface parking for transit commuters with structured parking. This can result in a significant barrier to implementing TOD.

Due to the complexity and importance of this topic, a separate report entitled *"Parking and TODs: Challenges and Opportunities"* has been prepared. (It is available from the California Department of Transportation, Division of Mass Transportation.)

IV. Transit 'Joint Development'

Heavy rail systems, like those found in Atlanta, Georgia, Washington, D.C. and the San Francisco Bay Area, offer an important insight into the ways that some transit agencies have responded

over time to integrating transit and land use. These systems have been operating for a minimum of 20 years. Each of them has pursued TOD though transit 'joint development' which involves offering transit agency-owned property that is physically or functionally related to a transit stop for private or public/private development.

One of the consequences of building heavy rail systems has been the need to acquire large amounts of land. A way in which this has been done is through the use of joint development. Through joint development, these systems have seen a significant amount of development on their property. By contrast, there has been limited privately-built TOD in the immediate area around stations.

What is noteworthy is that each of the systems is experiencing a renewed interest and emphasis on joint development as a revenue source, increased ridership, and 'livable communities' after a pronounced lull. More than any other factor, the Federal government's change in procedures for joint development appears to be responsible for the renewed interest.

Until Federal procedures were changed in 1997 [122] there was very little financial incentive for transit agencies to undertake joint development.

Under the old FTA rules, if land was acquired with Federal funds and a transit agency sold the land for joint development, they had to reimburse the Federal government for their share of the grant funds used to purchase the land. Typically 75 to 80 percent of the proceeds would go back to the Federal treasury. However, under the current Federal rules, proceeds from the sale or use of land for joint development can be retained by the transit agency.

Early Development Around Washington Metropolitan Area Transit Authority's Stations

Washington's transit operator, WMATA,[LVII] has undertaken more joint development projects than any other transit agency. To date WMATA has carried out 27 development projects at a value of more than $2 billion on land they own. These undertakings produce more than $6 million annually in additional funds to the Metro system.

In July 2000, WMATA released a Joint Development Solicitation for 15 sites ranging from over 30 acres to just one acre. The amount of revenues to WMATA is forecast to grow to $15 million annually by 2015. WMATA estimates they have realized a 50 percent price increase (over appraised value) on land sales in the past year. The premium in land sales to WMATA exceeds $50 million.[123]

One of the early examples of high-density redevelopment, the rail corridor between Rosslyn and Ballston in Arlington County, Virginia, includes many TOD design elements.[124] The County's General Land Use Plan calls for the concentration of high-rise residential

[LVII] Washington Metropolitan Area Transit Authority

developments within walking distance of the Metro stations. The Plan provides for a mix of office, retail, and residential units. Densities, heights, and uses are then tapered down to meet the adjacent single-family neighborhoods.

Until 1985, Ballston was the end of the rail line and the station area featured a large bus terminal. Nearby, there was a small commercial district surrounded by single-family homes and garden apartments. With the extension of the rail line in 1986, the bus connection was no longer needed. In the next five years, a new town of high-rise residential, office, and hotel structures sprang up within a quarter mile of the station. The bus transfer lot was redeveloped into the Metrorail station with the Metro Center located above. In addition to office space, this 28-story tower contains 200 hotel rooms, 284 condominium units, numerous retail shops, and a health club.[125]

More 'Joint Development' than TOD

More times than not, TOD in the vicinity of commuter rail stations has been an after thought. In many ways this is understandable. Washington, Atlanta and the Bay Area built multi-line regional transit systems that span many jurisdictions. With these systems, the challenge and opportunity of TOD is necessarily regional and multi-governmental in nature. It is therefore more difficult for these transit agencies to implement a system of TODs.

Until fairly recently, these transit systems haven't paid enough attention to land use issues surrounding their stations. In Washington, the leadership has come from local governments, not WMATA. In addition, Atlanta station areas typically have no special zoning, parking or design requirements that take advantage of the presence of a transit station. While BART has been operating for 25+ years, only in the last decade or so has it intensified its working relationship with local communities in the areas around BART stations.

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Transit 'Joint Development' at Bethesda Metro Center directly above the WMATA subway stop

When these transit systems were built, station area plans were produced to focus development around the stations. Yet the leadership and the resolve to transform those plans into reality rarely materialized. As a result, many of the plans stayed on the shelf.

The transit villages in Bethesda Maryland, Ballston in Washington and Pleasant Hill in the San Francisco Bay Area, became the exception not the rule to the above issue. (For more information on TOD and Joint Development in Washington, D.C. refer to the separate appendix to this report)

V. Noteworthy New TODs

This study has identified a number of new TODs that are noteworthy both for attention today and for follow-up later. This is not intended to be a comprehensive list – it is just a starting point.

Denver, Colorado
The new City Hall for Englewood was built into a former department store on the site of the failed Cinderella City mall. Adjacent to Denver's new Southwest Corridor light rail, the Englewood TOD combines a transit hub with a civic and cultural center, as well as retail uses and entertainment. More than 500 residential units are planned, along with a park and open space. The 55-acre site is located on a prime downtown corner. The City purchased the property, developed a master plan focused on light rail, and sold parcels to developers. The Regional Transit District built the track and paid for parking.

Parsons Brinckerhoff

The Englewood City Hall is a former department store in the Denver region's first TOD

Atlanta, Georgia

Carter Associates

Lindbergh City Center Main Street

Lindbergh City Center, the flagship joint development project of Atlanta's transit operator MARTA, represents a mixed-use project consisting of office, retail and multifamily residential development on 47 acres owned by MARTA. The transit agency recognized the potential of this property during the early days of TOD policy formation. Using a competitive bid process, the Authority selected a private real estate consulting firm to help market the Lindbergh property in August of 1997. This initial marketing effort started a three-year process involving the selection of a master developer, public hearings, zoning, negotiation of long-term ground leases and contracts, court challenges, and many other activities that determined the final makeup of the Lindbergh City Center project.

A team headed by Carter & Associates was selected as the master developer. Their plan called for building a mini-city with a pedestrian-friendly Main Street as the public focal point. A pedestrian bridge extends to the existing transit station and into a multifamily residential area.

During the time MARTA and its developer were introducing the project to area residents, one of Atlanta's largest corporate citizens recognized the potential of the Lindbergh development. BellSouth asked to become the anchor tenant in the office portion of the project.

BellSouth's investment in the TOD represented part of an overall $750 million relocation of corporate operations from scattered suburban offices to a concentration near central city transit. Other partners involved in the Lindbergh City Center include Post Properties, Harold A. Dawson Company and Federal Realty Investment Trust.

As a part of its role in this project, MARTA will invest significantly in the upgrading of infrastructure, including sewer improvements and station expansion. These upgrades will be financed through the Authority's bonding capacity.

Portland, Oregon - Orenco Station: A 190-acre TOD is located 14 miles from downtown Portland on the Westside MAX light rail line. The project has received attention from the White House, and an award from the National Association of Home Builders as one of the 'best master-planned communities' in America. [126]

Tri-Met and the City of Hillsboro began working with PacTrust and Costa Pacific Homes during the station community planning program to develop a transit-friendly master plan for the site. Transit-oriented zoning for Orenco Station was approved in August 1996. Soon after, the development team submitted a master plan based on the zoning for 550,000 ft^2 of shopping, hotel, and theater space, 100,000 ft^2 of office and other commercial space, and a minimum of 1,834 residences. The plan envisioned a community with a pedestrian-oriented spine between Intel and the MAX station lined by parks, high-density residential areas, and neighborhood commercial spaces with residential units above.
Orenco Station strategically occupies all the land between Westside MAX and one of chipmaker Intel's high-technology plants. PacTrust originally acquired the 190 acres for industrial uses in Portland's burgeoning Silicon Forest.

Fletcher Farr

Orenco Town Center

Orenco Town Center is a vertically mixed-use TOD, office and residential over retail. PacTrust has completed construction of the Orenco Village Town Center and the village's Main Street with shops, restaurants, and residential lofts above retail space facing out onto
the street. To help create a 'pedestrian scale', the region 'flexed' $500,000 in Federal clean air funds to help construct the main promenade street.

According to Costa Pacific, the ability to "walk to [get] a pint of milk" is one of the main reasons for strong residential sales at Orenco Station. Sales of the small-lot single-family residence at Orenco Station has been brisk, with approximately nine homes selling per month.

Homebuyers received an annual transit pass with the purchase of their home. Nearly 80 percent of Orenco residents stated in a survey that their transit usage had increased since moving into their new residence.[127]

Orenco Station is showing that transit-oriented development can generate more transit trips and work well in the marketplace without public subsidy.

Pac Trust / Fletcher Far

Orenco Station Master Plan

Washington D.C

Construction has begun on the first phase of recreating the 'downtown' of Silver Spring near the nations capital as the vibrant center of the community. Silver Springs declined steadily since the early 1960s, when migration to new suburbs siphoned housing, offices and retail away from the core. After 10 years of stop-and-go planning along with citizen opposition, development is underway on a 20-acre parcel purchased by the city.

The concept developed by RTKL Architects is for an active, 16-hour-a-day downtown serving every aspect of Silver Spring life from breakfast to midnight snacks, from grocery shopping and Saturday trips to the hardware store, to cultural performances at the American Film Institute and sidewalk dining.

High-frequency bus service and a Metro Red line station are located within a 5-minute walk. [128] The project includes 450,000 square feet of retail 240,000 square feet of office, 255 apartments, a hotel, and the so called "demalling" of 'City Place', a five-story retail mall built in the 1980s, by opening it up to the street.

(The separate appendix to this report provides a detailed transit system-by-system review of the policy framework for TOD, the status of implementation, and highlights and key issues related to TOD in various locations in the U.S.)

CHAPTER 5: How is Transit-Oriented Development Being Implemented in California?

Authors of Chapter: GB Arrington, Topaz Faulkner, Terry Parker, and Daniel Mayer

I. Introduction

This chapter provides an overview of the status of the implementation of transit-oriented development (TOD) in California. The chapter begins with an overview of several issues, trends, and overall observations regarding TOD implementation in California. Next, there is a brief review of major differences between TODs near bus and rail stations. This is followed by a review of the status of implementation in each of the State's major metropolitan areas. Finally, the chapter concludes by providing brief 'profiles' of a dozen TODs recently built in California. (Note: additional detailed information about each of these TODs is included in the separate appendix volume.)

Transit-oriented development in California includes a variety of project types, locations, experiences, challenges and successes. The dozen TODs that are profiled in Section V of this chapter were chosen to reflect that diversity. They illustrate various challenges and 'lessons learned'. These profiles include:

- TODs served by a mix of modes, including: fixed route and shuttle buses, light rail, heavy rail, and inter city rail service.
- TODs comprised of a mix of different land use types in both urban and suburban locations – office, market rate and affordable housing products, social services, high technology, destination and local-serving retail, and mixed-use projects.

Parsons Brinckerhoff and the California Department of Transportation

Housing above retail along San Francisco's new Embarcadero light rail line

- TODs constructed at a variety of locations, ranging from new 'greenfield' sites, 'brownfield' sites, large and small-scale urban infill projects,[LVIII] and the conversion of surface transit parking lots into TODs.

[LVIII] 'Greenfields' are newly developing areas, often at the fringe of urban or suburban areas; 'Brownfield' sites are or have been contaminated; and 'urban infill' sites are located within existing developed areas.

- TODs in which a variety of participants took the lead – private developers, transit agencies, non-profit groups, redevelopment agencies, local governments, and public-private partnerships; and

- TODs that were partially funded with various types and amounts of public subsidy, as well as those that were completely privately-financed.

II. Overall Observations

It is estimated that between 1990 and 2000, over $14 billion was invested in mass transit in California.[129] During the past 30 years, this State has built more new rail systems, more miles of track, and more transit stations than any other state in America.[130] California also has several of the nation's highest-use transit systems.

California's growth has produced a record number of new transit-oriented developments. Even so, the dominant land use around the majority of the major bus and rail stations in California is still conventional, car-oriented development that neither responds to nor is supportive of proximity to transit service.

Following are some general findings and observations on the challenges and status of implementing TOD in California. Additional detailed information on challenges and barriers to TOD implementation is provided in Chapters 6, 7 and 8.

TOD Activity is Widespread

There has been more activity with TOD planning and implementation in California during the past decade than at any time in the state's post - WWII history. There are a record number of TOD projects underway around transit stops in California. Every major transit agency that was surveyed as part of this study reported at least one or more new TOD projects underway at its stations. For some transit systems, these are the first TODs they have been involved in after more than a decade of providing rail service.

Lennertz and Coyle Associates / Seth Harry

A proposed addition to the existing Pleasant Hill BART station TOD is one of a record number of TOD planning and implementation projects underway.

Variety in TOD Implementation

Given the scale of investment in bus and rail transit in California and the State's sustained rapid growth rate, it is worth noting that no consistent approach to transit-oriented development planning, design, or implementation has emerged in California. TOD planning and implementation have largely been local initiatives – all with different methods and priorities. However,

there are several common challenges and barriers to implementing transit-oriented development that are experienced consistently statewide.

The lack of consistency in the design and methods of TOD implementation at local levels may not be particularly surprising given a variety of factors:

- TOD planning and implementation in California has been episodic – starting and stopping with swings in the economy and political support;
- There are wide differences among the major regions in the state regarding land use and transportation planning and implementation;
- California does not have strong or cohesive TOD policies, programs, and/or objectives at the State level;
- The State has not taken a strong role in overseeing local land use planning.[131]

The Transit Villages Act of 1994 (referred to in Chapter 1)[132] is acknowledged by many as the most important step at the state level to raise the policy profile of transit-oriented development. At the same time, TOD observers generally agree that this legislation, while well-crafted, provides no funding and has therefore not been as successful as it could be in facilitating TOD implementation in California.

Roles of local governments and transit agencies in TOD

Successful TOD implementation requires a partnership between transit agencies, local governments, financial sources, and private developers. The key public sector player in successful transit-oriented development projects is often the local government (either city or county) – with zoning and comprehensive planning authority. Compared to transit agencies, California's local governments have the authority, tools, and development experience at their disposal to plan for and encourage transit-oriented development.

Parsons Brinckerhoff and the CA Department of Transportation

The 'Uptown District' in San Diego is an example of how bus TODs can be part of a community's strategy to

Where transit agencies or developers have difficultly obtaining the support of local governments, progress on TOD implementation in California has been limited. In some communities, local governments have been reluctant partners in pursuing transit-oriented development. In other communities, the transit agency has been the hesitant participant. However, where cities and transit agencies have

established a strong working relationship (such as in San Diego and parts of the San Francisco Bay Area, for example), TOD implementation has tended to flourish.

In several of the State's major metropolitan areas, transit agencies have played an important role in the education, advocacy and funding of transit-supportive development.[LIX] And, transit agencies often own land near stations that can potentially be used for transit-oriented development. However, transit agencies lack authority over land use to approve such projects (land use authority in California is held solely by local governments).

There are considerable opportunities for conflict between local governments and transit agencies regarding planning and implementing transit-oriented development. Transit agencies and local governments may have very different goals, priorities, and constraints. For example, transit agencies can be expected to maximize ridership and agency revenues, while cities may have a completely different set of objectives. For example, in response to local community concerns, many cities have resisted the land use zoning changes that are necessary for TOD, especially if they include somewhat higher densities than surrounding neighborhoods.

[LIX] 'Transit-supportive development' and 'transit village' are terms that are used interchangeably with transit-oriented development in this report.

III. Bus and Rail TODs: An Overview

This section takes a closer look at several issues regarding a successful bus TOD strategy. Transit-supportive development can be implemented in communities with rail or bus investments. In communities across California, TODs at major bus stations also present an attractive strategy to respond to growth. (However, the experience in California, like the rest of the country, tends to be somewhat mixed regarding bus TODs.) The 'Uptown District' in San Diego (see profile later in this chapter) is an exceptional example of a bus TOD and redevelopment project.

One of the important advantages of a TOD strategy for bus or rail systems is that transit-oriented developments can increase transit ridership[133] and facilitate providing transit service to growing areas.[134] Furthermore, by helping to focus growth in more compact areas, TODs can allow transit operators to more efficiently provide service.[LX]

[LX] Typically 80 percent of the cost of providing bus service is the cost of the operator. Transit service is expensive to provide in suburban areas in part because of the cost to extend routes to reach new development and the dispersed nature of suburban trips. A TOD strategy addresses both of those barriers. In comparison to conventional dispersed suburban development, serving TODs can be cheaper because fewer service hours are required to provide the same level of service.

Focus on a Few Stops
An advantage of bus service is that it can be ubiquitous – buses may serve an entire community. In addition, the routes and service levels are more flexible than rail. However, these factors can also present a disadvantage for moving forward with a TOD strategy.

Because the locations of bus routes are not fixed or permanent, this greatly increases the risk of investing in transit-supportive land use development. In addition, along bus corridors it is more difficult to focus attention and resources on the numerous bus stops, compared to a limited number of rail stops. In San Diego, for example, there are 49 light rail stops and 3,400 bus stops.[135]

One advantage of rail transit is that programs and incentives can be targeted to specific, permanently located rail stations. If the same advantages were bestowed upon numerous bus stops, the limited incentives available would become diluted and confer little advantage. Therefore, a successful bus TOD strategy will need to be strategically focused on a few key locations.

Differences With Technology?
One of the questions to ask when considering bus versus rail TOD is: *Does a specific transit technology have a material impact on the opportunity to create a successful transit-oriented development?* Simply stated, the transit technology does not, in and of itself, create land use development impacts or benefits. High-quality bus service, light rail, commuter rail, or heavy rail does not automatically guarantee the success or failure of TOD implementation strategies.

In addition to the type and level of transit services, other important factors for successful transit villages include: how transit fits into the urban environment; the location and design of stations; the quality and coverage of transit service; the strength of the local real estate market; the planning and policy framework for transit-friendly development; and perceptions of the development community, neighborhoods, and government about transit and land use.

Ottawa, Canada, and Curitiba, Brazil, are often cited as successful examples of shaping growth with bus service. Dr. Robert Cervero, who conducted an assessment of Ottawa's busway,[136] states that the reason such a system has not been replicated in the U. S. has largely to do with the poor reputation that bus service has here. He adds: "the 'bus rapid transit' program is trying to change this but buses are still stigmatized as second-class forms of transportation. Brazil has managed to shake this image, but I'm not exactly sure why. I think modern, low-floor buses help a lot."[137]

Bus Rapid Transit
Bus Rapid Transit (BRT) is an emerging technology that provides an opportunity to capitalize on many of the advantages of rail with the lower cost and flexibility of buses – like a "train on wheels." Los Angeles has a successful BRT demonstration project underway on two routes: Whittier-Wilshire Boulevard (line 720) and Ventura Boulevard (line 750).

According to the Los Angeles Metropolitan Transportation Authority (LA MTA),[138] ridership is much higher than expected - and they met their goal to decrease trip times by 25 percent.

Los Angeles MTA

Metro Rapid Bus demonstration project in Los Angeles

LA MTA's Bus Rapid Transit service includes the following:

- Low floor buses painted differently than regular buses;
- Stations spaced further apart, similar to light rail;
- Special 'transponders' that keep the traffic signal light green longer at intersections to speed bus travel;[LXI]
- Specially-designed station stops, some with message signs that advise travelers of the specific times when the 'next bus' will arrive; and
- Ticket machines at stations for pre-paid tickets (future)

LA MTA is also considering putting two BRT routes on exclusive guideways that would have extensive landscaping and other urban design amenities. Designated stations will serve as major transit hubs and have large park-and-ride lots.

Other Considerations

Beyond the differences between bus and rail, there are other important differences to keep in mind when planning and implementing a TOD strategy:

- Rail riders and bus riders have tended to be somewhat different demographically. Rail systems have been effective in attracting new "choice" riders to transit, and new riders tend to have higher incomes than existing bus riders. For example, new transit riders comprise 45 percent of total riders on a new light rail system in Salt Lake City (Utah), and 39 percent in Denver (Colorado).[139] It is likely that similar results could also be achieved with new high-quality 'BRT' bus service.
- The different geographic and travel markets they serve explain part of the demographic difference between rail and bus service.
- Many new rail investments have been targeted to serve the more affluent suburban-to-downtown markets, while buses tend to serve existing urban markets.

[LXI] A transponder, in this case, is a device that transmits information about the location of a bus to a traffic light. In response, the traffic light adjusts its timing, reducing the amount of time the bus spends waiting for the light to change.

- Rail and bus service tends to have significant differences regarding the use of supportive public policy and incentives in areas around stations. Because of the magnitude of rail investments and the "newness" of the investments, rail development is more likely to have supportive public policies.

- The location of rail transit is relatively fixed, while the permanency of bus line locations is uncertain. This uncertainty increases the ability of developers and financiers to invest in transit-supportive development near rail stations, as compared to bus stations and corridors.

- Rail systems are more likely to present opportunities for transit 'joint development' on transit agency-owned property as compared to buses, given the nature of the construction process for rail.

Los Angeles MTA

Model of an MTA Metro Rapid Transit Station

- Finally, rail systems have a proven track record of TODs around stations, while bus TODs are more rare.

Conclusion – Bus and Rail TOD
Both bus and rail transit villages can be effective tools to help shape growth in California. With good planning, favorable market conditions, and strong leadership, it is reasonable to assume that, over time, many of the negative perceptions regarding investing in TOD along high-quality bus lines can be overcome.

Rail has consistently demonstrated an ability to shape growth, attract new riders, and increase property values when it is implemented in a growing market with supportive policies in place. The opportunities for transit-oriented development are more limited with buses than with rail. Making bus TODs work will require a focused approach and an extra level of leadership and intervention than a comparable rail TOD. At the same time, as a public policy tool, bus-oriented transit-supportive developments show promise as a 'smart growth' strategy to focus development, reduce dependence on the automobile and help revitalize cities.

IV. Regional TOD 'Snapshots'

There are many transit-oriented development efforts underway across California. The San Francisco Bay Area and San Diego stand out as leaders in TOD planning and development. The experience of these regions can be valuable to other areas in California, as well as outside the state. Two of the major transit agencies in these regions (BART in the San Francisco Bay Area, and the Metropolitan

Transit Development Board [MTDB] in San Diego) grew into their TOD roles after a slow start. During the last decade, both agencies have partnered more closely with cities and regional agencies in planning and implementing transit villages.

Following is a series of brief overviews of the current status of TOD in each of California's major metropolitan areas, starting in Sacramento and moving to the southernmost part (San Diego). This is followed by a set of 'profiles' describing sample TODs in each of these areas, including "lessons learned" from their implementation.

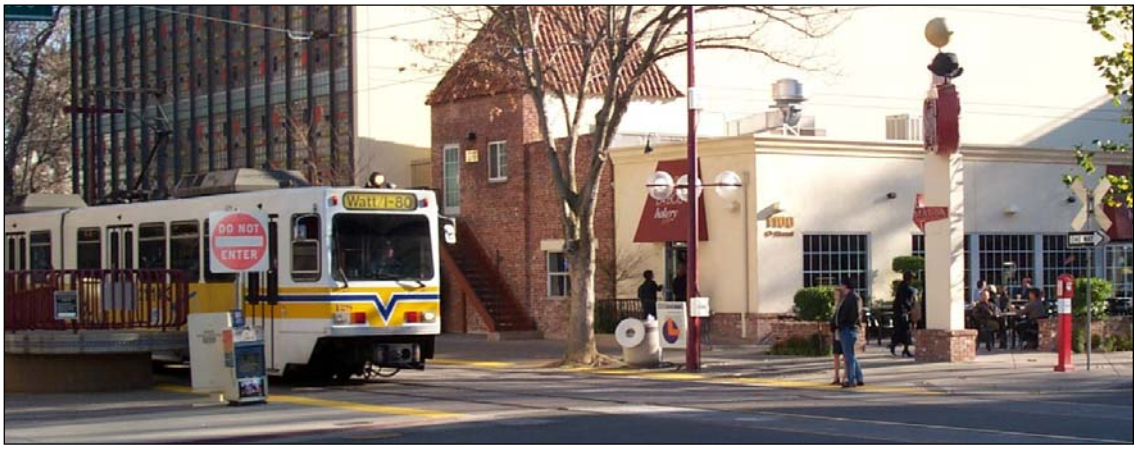
Sacramento Area

Sacramento Regional Transit (RT) has been operating light rail since the spring of 1989 without paying serious attention to transit-oriented development – that is, until recently. Ironically, the nation's earliest TOD-focused General Plan was adopted by Sacramento County in the early 1990s. Unfortunately, the TOD components of this plan have not been consistently implemented.

Even so, Peter Calthorpe's *Transit-Oriented Design Guidelines for Sacramento County*[140] has provided a framework for linking transit and land use development in several other jurisdictions in the U.S. (Please refer to the Appendix volume for more detail on this framework.)

The City of Sacramento has adopted a policy to allow higher-density land uses near transit stations and is actively attempting to integrate transit villages into several community plans.[141] For example, the 'R Street Corridor Plan' was adopted by the City for a portion of an existing light rail line near the Central Business District (CBD). This Plan requires minimum densities in the corridor and near the transit stations; ground-floor uses that promote pedestrian activity; and an emphasis on housing for upper floors of mixed-use projects. Several projects consistent with the Plan have been built.

In addition, since 1998, the City has been working with community members to prepare a TOD land use plan and zoning change for a



Parsons Brinckerhoff

Light rail station at 'Posey's Corner' in downtown Sacramento

neighborhood surrounding a light rail station east of downtown. A draft of that plan has been completed, with the assistance of the 'PLACE^{3}S' [LXII] planning method and software. The Plan focuses on redeveloping this area into a 'University Village' that will provide housing and retail opportunities for students and faculty at the nearby California State University, Sacramento campus.

During the past few years, in a pattern similar to California's other transit agencies, the Sacramento Regional Transit District (RT) has dramatically increased its efforts to work with local communities on planning and implementing transit-supportive development. As part of its current eastward 'Folsom Corridor' and 'SouthLine' light rail extensions, RT secured funding from the Federal Transit Administration (FTA) to undertake a major TOD community planning program.

RT's 'Transit for Livable Communities'[142] effort is designed to identify ways that the new SouthLine light rail line and Folsom extensions can most effectively benefit the communities they serve. A major result of the project will be the identification of ways to use parcels of land RT owns at stations for 'joint development'. Also, RT is hopeful that these efforts will result in local government actions to rezone the land surrounding transit stations to allow transit-supportive land uses.

[LXII] PLACE^{3}S: an interactive urban planning method and GIS tool to help communities make informed planning choices for TOD. (Additional information about this tool is provided in the Appendix volume.)

The San Francisco Bay Area

The four major transit agencies in the San Francisco (SF) Bay Area have been active regarding TOD. These are: the Bay Area Rapid Transit District (BART), the San Francisco Municipal Railway ('Muni'), Caltrain, and the Santa Clara Valley Transportation Agency (VTA).

The activities of these transit agencies in TOD have been enhanced by efforts occurring at a regional level in the Bay Area. For example, in 1990 the Association of Bay Area Governments (ABAG) adopted policies to allow for the development of new communities along transit corridors and to encourage cities and counties to focus housing and jobs in proximity to transit stations.[143]

In the face of two of the Bay Area's most serious problems – escalating traffic congestion and a severe housing shortage – in the late 1990s the Metropolitan Transportation Commission (MTC) initiated a program designed to encourage planning and implementation of "livable communities" efforts, such as improved pedestrian and bicycle facilities, better access to transit, and similar local programs. This effort was entitled the 'Transportation for Livable Communities Program' (TLC) for which MTC set aside $54 million in flexible Federal funds over six years (from 1998 through 2003).

In 2001, MTC decided to significantly expand funding for the popular and successful TLC program to $29 million per year (from $9 million).

The TLC program provides funds to local jurisdictions for planning and capital improvement projects, such as streetscapes, bicycle and pedestrian facilities, transit-oriented development, and other local 'livable communities' efforts.

Metropolitan Planning Commission

Higher-Density Housing along VTA's Light Rail Line

Starting last year, MTC also initiated another new program entitled the 'Housing Incentive Program' (HIP), which distributes funds to local jurisdictions as a 'reward' for locating new compact housing near transit stations. Jurisdictions may spend the HIP funds they receive on any neighborhood-based transportation projects that are consistent with MTC's TLC program guidelines.[144]

Santa Clara Valley Transportation Authority

The Santa Clara Valley Transportation Authority (VTA) provides bus and light rail transit service in California's "Silicon Valley" south of San Francisco. VTA has been proactive in promoting and implementing transit-oriented development for some time. For example, the 'Tamien Child Care Center' was nationally recognized when it opened in 1995. VTA created a precedent when it undertook a so-called "tranodominium" project on an underutilized park-and-ride lot adjacent to the Ohlone–Chynoweth light rail station (see TOD profile later in this chapter)[145]. In 1997, the Board of the Santa Clara Valley Transportation Authority (VTA) adopted a Strategic Plan that includes the integration of transportation and land use as one of its five major goals.[146]

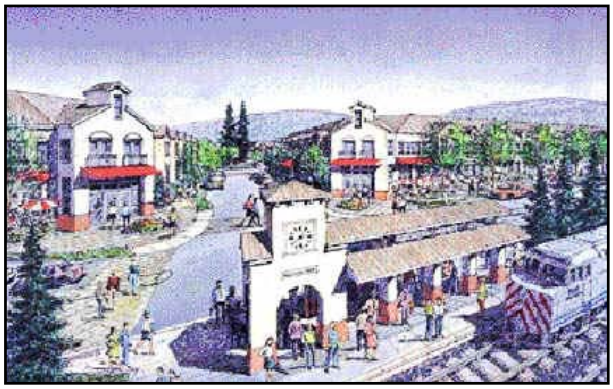
Several of the local jurisdictions in the Silicon Valley have been active in the TOD 'arena'. For example, the City of San Jose has taken an important leadership role in providing a framework for TOD by revising its general plan to provide for high-density development around transit stations[147]. The City's *Housing Initiative Program and Intensification Corridors Special Strategy* targets station areas for high and very high-density housing.[148]

Efforts have recently accelerated with the opening of the 'Tasman West' light rail line in December 1999.[149] According to staff of VTA, the Cities of Mountain View and Sunnyvale have actively pursued policies that promote development in proximity to light rail. The City of Mountain View, for instance, rezoned 40 acres of industrial land for 520 housing units adjacent to the 'Whisman' light rail station.[150]

Due to the shortage of affordable housing in the Santa Clara Valley, the VTA Board is also interested in developing several agency-owned, underutilized light rail parking lots for housing.[151]

Caltrain

Caltrain, a commuter rail system that links San Francisco to San Jose and Gilroy, is operated under a Joint Powers Agreement among the counties of San Francisco, San Mateo, and Santa Clara. In October 1997, the Caltrain Board of Directors approved a resolution in support of Transit-Oriented Development (TOD), and instructed staff to produce a document containing design guidelines and strategies for infill, redevelopment and new growth along the Caltrain Corridor.



Calthorpe Associates

Design for a Caltrain Station at 'The Crossings' TOD in Mountain View

As a result, Caltrain is partnering in numerous TOD plans with more than 17 local jurisdictions in its tri-county service area. For example, 'The Crossings' in Mountain View is a Peter Calthorpe-designed TOD built in the mid-1990s on the site of a defunct 1960s-era shopping mall that was suffering financially.[152] After the mall went out of business, the City of Mountain View rezoned the site for a TOD. Now, a higher-density, mixed-use 18-acre development is adjacent to a new Caltrain station. It includes stores and more than 500 dwelling units – apartments, condominiums, and single-family housing. The overall housing density averages nearly 30 units to the acre.[153]

Bay Area Rapid Transit District (BART)

California's oldest urban rail mass transit system also has the most complex history with transit-oriented development. When BART was originally built, there was an expectation that higher-intensity development would automatically take place near BART stations. This was based on the premise that if BART built a transit station, then suitable development would fairly automatically follow.

Unfortunately, outside several urban core areas, intense development generally did not follow the building of BART. As a special district with no land use authority, BART did not make a concerted effort to modify local land use designations and zoning codes, or to assemble land or undertake development programs.[154]

Fortunately, several of the jurisdictions served by BART (such as the cities of Berkeley, Concord, Fremont, Hayward, Oakland, Orinda, Richmond, San Francisco, and Walnut Creek) have long identified BART station areas as focal points for higher-intensity land uses. Even so, TOD development has not taken place in these areas without effort.

The areas adjacent to BART stations in downtown Oakland (most notably Oakland's 'City Center') and Berkeley have experienced significant increases in office development, commercial growth, and residential density. Since BART initiated service in 1972, the amount of office space in downtown San Francisco has tripled, associated with at least 200,000 new jobs. In 1973, San Francisco adopted a 'Transit First' policy that mandates transit-supportive development and limits parking. Today, about one-half of all people crossing the bay to San Francisco during morning commute hours ride BART.

In 1984, with the enactment of a 'Station Area Development and Implementation Policy,' BART initiated an active transit 'joint development' program (for which supportive policies had been in existence since 1969). Since then, BART's "one-for-one" parking replacement policy has been a major factor in shaping the nature of development on BART property in suburban portions of the San Francisco Bay Area. BART's 1984 joint development policy requires that proposed TOD projects provide a competitive investment return to BART's land value. Thus, projects that could not at least pay for the cost of replacing BART surface parking places (estimated then at $25/square foot of land) were not implemented. Because of this, nearly all of BART's potential development sites near transit stations are still used as surface parking lots.

In the mid- to late-1980s, numerous transit-supportive development efforts were undertaken. Included was the sale of Transferable Development Rights (TDRs) at the Pleasant Hill Station and negotiation of a ground lease for a hotel development at the Concord Station. The Pleasant Hill BART station area is one of the first suburban TODs developed in the United States.[155]

The Pleasant Hill BART station planning effort was led by Contra Costa County. It has involved creating 'Specific' and 'Redevelopment' plans, assembling land, and issuing bonds for infrastructure improvements. (For a discussion of the Pleasant Hill TOD, see its profile later in this chapter). However, just after the projects at Pleasant Hill and Concord took shape in the late 1980s, the real estate market entered a recession, which significantly slowed progress.

In the late 1980s, BART re-initiated its joint development effort. BART's first joint development solicitation was released in 1991 for its two stations in El Cerrito. Staff also conducted a number of Board of Directors workshops on joint development. The general objective for the joint development program is generating annual revenue (and/or capital offsets) along with transit riders.

Calthorpe Associates

Housing is planned for the Richmond BART station

Recognizing that local support is necessary for successful joint development projects, BART initiated numerous cooperative planning activities during the mid- to late-1990's in concert with local jurisdictions. One of these was participation in the Castro Valley Specific Plan effort through the release of a request for proposal, selection of a developer, and construction of a transit-oriented development project.

Like many organizations, BART has changed its approach over time. The Strategic Plan most recently adopted in 1999, for instance, emphasizes a community-based emphasis for TOD. The plan states: "In partnership with the communities that BART serves, we will promote transit ridership and enhance the quality of life by encouraging and supporting transit-oriented development within walking distance of BART stations."[156]

San Francisco 'Muni'

Muni has operated rail service in San Francisco's neighborhoods for many years without any direct involvement with transit-supportive development. At the same time, the City of San Francisco has been a pioneer in leading the rest of the nation regarding what can be done to establish transit-friendly policies. Limits on downtown parking and its 'transit first' policy are two notable examples.

The construction of a new light rail line to the South Beach area opened the door for Muni to participate in joint development. An excess parcel along the waterfront has enabled Muni to undertake its first major transit 'joint development' project. In 1999, Muni completed a 3-year process to allow a 200-room hotel to be built on its property (across The Embarcadero from the Ferry Building) on San Francisco's downtown waterfront. Project construction started in June 2001, and a 65-year ground lease will generate $311 million in revenue to Muni, while an additional $540 million in other taxes will flow to the City of San Francisco.[157]

The South Beach area adjacent to the Embarcadero light rail extension area has been transformed into a high intensity mixed-use, transit-friendly community. There is some debate about whether transit played a role in the transformation of the area. However, it is clear that transit availability was one criterion that the City of San Francisco considered in planning the redevelopment of the area. There can be no doubt that the result is a transit-friendly community in one of the most spectacular settings for TOD in the United States – overlooking San Francisco Bay.

Southern California

Despite various efforts to establish transit-oriented development districts in Los Angeles County, few local jurisdictions have taken a strong lead in station area planning in this region. The Los Angeles County Metropolitan Transportation Authority (MTA) has focused its efforts on joint development of agency-owned properties, resulting in projects such as Hollywood/Highland (see profile in this chapter) and a few smaller projects. The MTA is now taking a closer look at its role in promoting station area development.

Parsons Brinckerhoff

Light Rail station on the Los Angles Blue Line running from LA to Long Beach

The foundation for TOD planning in Los Angeles was established in 1993 with the adoption of "A Transportation/Land Use Policy for Los Angeles," a joint policy between the City of Los Angeles and the Los Angeles County Metropolitan Transportation Authority. Although the policy has had some impact on the establishment of transit-oriented districts within Los Angeles, it has not yet resulted in any significant TOD projects.

The City of Los Angeles Planning Department designated a special TOD Planning Unit for several years to develop transit-oriented districts around rail transit stations. The original goal was to designate seven districts in a variety of station areas. To date, however, only two TOD plans and associated ordinances have been or are in the process of being adopted. These projects have been successful primarily due to strong political support by local elected officials.

The County of Los Angeles has also designated transit-oriented districts around four Long Beach 'Blue Line' and two Norwalk-El Segundo 'Green Line' light rail stations. However, the County does not have a program to proactively create development opportunities.[158]

One of the most active local jurisdictions in Southern California is the City of Pasadena. The City's General Plan Land Use Element contains numerous references to TOD in its objectives and policies.

The City has been implementing transit-oriented developments along with transit-friendly specific plans years before its light rail system arrives. (An example of this is the 'Holly Street Village' housing development in downtown Pasadena, which has a light rail station built into the ground-floor, awaiting arrival of the new line).

A new light rail line connecting downtown Los Angeles and Pasadena is scheduled for completion in 2003. Phase I of the Project will extend 13.7 miles from Union Station in downtown

Los Angeles, serving the communities of Los Angeles, Chinatown, Lincoln Heights, Highland Park, to South Pasadena and Pasadena.

There are six new stations planned in Los Angeles, one station in South Pasadena, and six in Pasadena.[159] This project includes plans for developing 'excess' right-of-way parcels, which the Pasadena Construction Authority expects will contribute approximately $30 million toward the capital cost of the light rail project.[160]

San Diego

San Diego is widely acknowledged as a leader in transit-oriented development within the State of California. San Diego opened America's first modern light rail system in 1981, but did not initiate any TOD planning until several years later.[161] Whereas TOD was not considered in planning the first light rail line, TOD projects and plans are now in place at more than 15 of the light rail system's 49 stations.[162]

The City of San Diego has been a willing partner in supporting both mass transportation and transit-supportive development. The City was one of the first localities in the nation to adopt "Transit-Oriented Development Design Guidelines" in 1992. [163]

San Diego has also implemented a unique 'transit overlay zone' that reduces parking in areas that have a high level of transit service, and has been proactive in planning for urban development downtown and in other communities.

In San Diego it is possible to see two of the most recognizable examples of TOD in California. One of these is the American Plaza (for which there is a profile in the following section). The other is the Mills building, which houses the Metropolitan Transit Development Board (MTDB) headquarters. The light rail train passes through both buildings.

Parsons Brinckerhoff and the California Dept. of Transportation

The Hazard Center stop on the Mission Valley Light Rail line serves a shopping center, offices, and housing

TOD has also been an important consideration in the design and alignment of the Mission Valley East light rail extension that began operations in November 1997.[164] (See the TOD profile on Rio Vista in section V of this chapter for more detailed information).

The City of San Diego's Planning Department and MTDB have a strong history of coordination that provides a model for other areas. The City assigns a planner directly to the MTDB planning staff to work as a technical expert and liaison on TOD. This kind of direct collaboration is unique within the United States.

At a regional level, the San Diego Association of Governments (SANDAG) approved a 'Regional Growth Management Strategy' that calls for increased development in "transit focus areas (TFA)."[165]

Also, MTDB recently coordinated an 18-month '*Transit Works'* process to define the role that transit could play in helping to solve the San Diego region's growing transportation challenges. As a result, MTDB has adopted a new strategic plan ('*Transit Now'*) calling for the aggressive expansion of modern transit service, as well as transit-supportive land uses.[166]

Parsons Brinckerhoff and the California Department of Transportation

This San Diego light rail station is located within the America Plaza TOD in downtown San Diego that includes offices, shops, and an art museum.

V. California TOD Profiles

Following are brief overviews of 12 sample transit-oriented developments at major bus and rail stations in each of California's major metropolitan areas. More detailed information on each of these is available in the Appendix volume, including details about how they were implemented as well as people who may be contacted for additional information.

Sacramento Area:

1. Aspen Neighborhood, West Davis

Developer:	West Davis Associates
Jurisdiction:	City of Davis
Transit Agencies:	Unitrans; Yolo County Transit Authority
Transit Service:	5 bus routes; 5 to 25-minute frequency

This neighborhood in Davis (a university-oriented city of 60,000 located near Sacramento) was not purposely built as a transit-oriented development; but it has evolved to function as one. It includes medium-density residential development near a sheltered transit stop in a suburban neighborhood at the corner of Arlington Blvd. and Shasta Drive in West Davis (west of Highway 113).

This bus stop is easily accessible by wide tree-lined sidewalks, bike lanes, and controlled pedestrian crossings. Two medium-density apartment complexes are located across the street from the bus stop: the Heather Glen low- to moderate-income apartments, and Aspen Village (market-rate) apartments. In addition, the Muir Commons "co-housing" development is located a short walk up Shasta Drive. There are also single-family homes;

California Department of Transportation

Bus stop serves students & commuters

including pedestrian-friendly "Village Homes", which is just south of the transit stop. Elementary and middle schools are also located within a five-minute walk from this corner, and there is a small shopping center within a 15-minute walk.

In 1991, West Davis Associates, developers of the Aspen neighborhood, built the two-story "Aspen Village" apartments. Financing for this market-rate complex was from private sources. Aspen Village includes 88 units on 4.5 acres (at 20 dwelling units (du) per net acre density), with 230 parking spaces (2.6/unit).

Along the west side of Aspen Village Apartments is a scenic open space area, the West Davis Pond, created primarily as an overflow area for storm water. Due to its design, this large pond area also provides a haven for geese, shorebirds, and native plants. Along the east side of the pond is a 12-foot wide pedestrian/bicycle path that is heavily used by neighborhood residents and visitors for both recreation and transportation.

California Department of Transportation

Interior courtyard of Heather Glen affordable housing complex

In 1992, the Community Housing Opportunity Corporation (CHOC) built the affordable Heather Glen Apartments on land the developer donated in compliance with the City's "inclusionary affordable housing" ordinance. Funding for Heather Glen was provided by Yolo County and the Federal department of Housing and Urban Development (HUD). CHOC continues to manage this successful rent-controlled complex for low and medium-income families. There has been no community concern or opposition to this attractive and well-maintained development.

Heather Glen's two-story apartments are clustered around a central lawn and play area that is visible and well maintained. It is less than one block from the transit stop. The complex consists of 62 units on 3.5 acres (a net density of 17 dwelling units(du)/acre), with 124 parking spaces (2 spaces/unit).

The 'Muir Commons Co-Housing' community is a bit further north on Shasta Drive, still within a 10-minute walk from the transit stop. This innovative project was built by West Davis Associates in 1991 with significant design input from the future residents. Muir Commons also contributed to the developers' compliance with the City's "inclusionary affordable housing" ordinance. It is situated on 2.9 acres (9 du/acre net density), with 45 parking spaces (1.7/unit).

The community consists of: 26 self-contained townhomes with small front and back yards; a large community building with a commercial-size kitchen, dining room, children's play rooms, a meeting room, and laundry facilities; a lawn and children's play structure; bicycle storage facilities; a garage; a community garden; an orchard; a hot tub; and landscaped sitting areas. The layout of the site encourages community interaction and safe play for children.

The east portal to Muir Commons connects to a city greenbelt and bicycle/pedestrian path. This path is part of a citywide system to which the City requires every new development to connect and contribute.

California Department of Transportation

Interior courtyard in *Muir Commons*

Transit Service

The transit stop was built by the two transit agencies (Unitrans and YoloBus) with funding from the developer after the housing developments were completed. Bicycle racks are provided next to a covered, shaded bus shelter. Five bus routes serve this transit stop. In addition, two commuter express routes of the county's intercity bus service, YoloBus (routes 230 & 231), provide morning and evening service from Davis to downtown Sacramento. University students and commuters heavily use the bus stop.

Lessons Learned

This neighborhood is a successful example of a suburban bus TOD. There has been very little community opposition to the well-designed and maintained medium-density housing complexes in this neighborhood. Residents have easy access to the two bus services, which are located within easy walking distance of most housing units.

Due to the success of this bus stop, there have been relatively few parking-related complaints regarding Aspen Village apartments. The developer has indicated that future projects will therefore be refined versions of this neighborhood design due to its success.

San Francisco Bay Area:

2. EmeryStation, Emeryville

Developer:	Wareham Development
Jurisdiction:	Emeryville
Transit Agency:	Amtrak and Emery Go-Round shuttle from BART station
Transit Service:	Amtrak: 13 daily round trips; 'Emery Go-Round': 10-minute peak service

Parsons Brinckerhoff and the CA Dept. of Transportation

An Amtrak station anchors this 20-acre mixed-use TOD on a former brownfield. A pedestrian bridge spans the tracks.

EmeryStation is a 20-acre mixed-use transit-oriented development anchored by an Amtrak station in the city of Emeryville in the East Bay. The site is located on a former 'brownfield'. Wareham Development and the City of Emeryville provided the leadership to implement the project that includes reuse of old industrial buildings and new construction.

The project was initiated by the City, which was interested in having a train station in Emeryville.[LXIII] Amtrak offered to pay lease expenses for a new station, and the City negotiated the purchase of a three-acre site from Chevron and leased a quarter of it to Wareham to build a new rail station. The station opened in 1993.

In 1996, the City completed construction of a pedestrian bridge over the rail tracks to a nearby mixed-use center.

In 1998, construction began on 'EmeryStation Plaza', a three-building 550,000 square foot mixed-use complex on the north, east and south sides of the new Amtrak station. Between 10 to 15 percent of this development is ground floor mixed-use space, allowing retail,

Photo by Kim Harrington, provided by Wareham Development

The TOD currently includes 550,000 sq. ft. of office, 150 residential units and ground- floor retail.

[LXIII] The City provided $5.8 million to build the station; Wareham contributed $1.5 million.

commercial or office uses as the market demands. In the first phase of the project, a 240,000 square foot, five-story office building was built that includes ground-floor retail and two levels of parking underneath.

EmeryStation also includes approximately 150 units of owner-occupied lofts and townhomes, plus a senior housing project. Permits have been issued for 100 units of rental apartments to be built next to the Amtrak station. Phase II of EmeryStation North was completed in 2001. At build-out, the investment in EmeryStation is estimated to total at least $200 million.

Emery Go-Round
A free shuttle service – the 'Emery Go-Round' - links Emeryville's busiest business, retail and entertainment areas. It also provides access to the McArthur BART station two miles away. The buses operate from 5:45 am to 9:30 pm, with 10-minute headways during peak commute periods. Various employers and businesses in Emeryville pay for the service. The City requires new development projects to contribute to the operation of the shuttle as a condition of development approval.

Parking
Most of the buildings have three parking spaces per 1,000 square feet, reflecting the standards in the City's code. Residential parking is one space per bedroom. Wareham believes parking could be reduced by 10 percent without impacting the project.

Wareham's strategy was to strengthen multiple modes of transit to help the project's viability. Approximately two-thirds of EmeryStation's original tenants moved there from San Francisco; now the project draws tenants from throughout the Bay Area.

Wareham Development

Amtrak's interest in an Emeryville station, combined with the leadership of Wareham Development, helped transform this brownfield into a TOD.

Lessons Learned
EmeryStation is an example of how a developer with a long-term view and a small city can partner with Amtrak and the State to create a significant TOD.

Wareham Development has taken a flexible approach to address market opportunities. Also, this site had brownfield contamination issues - Wareham's extensive experience in working with regulatory agencies on remediation as well as its ability to obtain loans and grant funds through the City was critical in making the new train station and associated land use development possible on this site.

3. Fruitvale Transit Village, Oakland

Developer:	Fruitvale Development Corporation
Jurisdiction:	City of Oakland
Transit Agency:	Bay Area Rapid Transit (BART)
Transit Service:	BART Station (10-15 minute service)

Unity Council

Fruitvale Transit Village is a mixed-use TOD involving 20 public funding sources. The scale and complexity of the project have been a barrier in moving from this model to construction.

The Fruitvale Transit Village involves the redevelopment of 5.3 acres of BART surface parking into housing and a community center. The Unity Council (formerly the Spanish Speaking Unity Council), created the Fruitvale Development Corporation (FDC) for the purpose of developing this mixed-use, public/private project.

The project was conceived as part of a neighborhood alternative to BART's construction of a parking structure at the station. BART relinquished its plan and agreed to work with the Unity Council to pursue a different type of development. The core of the transit village will cover five acres, including a 99-year ground lease of BART's property.

The project is being completed in phases. In the initial phase (completed in 1998), sewer and water lines were installed, 67 units of affordable senior housing were built, and trees were planted.

Groundbreaking for the second phase occurred early in 2002, for a new parking structure on a 300-space surface BART parking lot. These surface parking spaces will also be replaced by parking at nearby locations, resulting in a net increase of 415 spaces.

Unity Council

The Transit Village was originally conceived as a neighborhood alternative to the construction of structured BART parking at that site.

Project Funding

The Fruitvale Transit Village received the Federal Transit Administration's first Livable Communities grant. The Fruitvale Development Corporation also used small grants to fund a façade


Unity Council

The first phase of construction includes 67 units of affordable senior housing.

improvement and building renovation program involving more than 100 properties along the business corridor. (Before this program, vacancies had been as high as 40 percent in the area; now, they are less than 1 percent.)

Ultimately, more than 20 sources of funds have been combined to raise the total amount needed. Most of these are public funds, with an additional expected $20 million in private investments. Each funding source has its own set of special requirements, some of which are conflicting. It took significant time and effort to negotiate a set of acceptable requirements for each element of the project and to make the various timelines mesh.

Parking
Parking is a key element of this project. Without replacement parking for BART riders, it would be more difficult for BART to transfer its land for the TOD. The FDC obtained $7.6 million in grant funds for a new parking structure for this purpose. These funds will be credited toward the ground lease with BART.

The City of Oakland has created a special zoning district with reduced parking requirements for residential and commercial land uses in the Fruitvale TOD due to its design and proximity to transit. In this special zone, the residential parking requirement of one space for every two units of housing is well below the minimum citywide requirement of one space for each unit. No parking is required in this special district for commercial uses.

Lessons Learned
The Transit Village demonstrates the power of a community to attract grant funds and to develop solutions that meet its unique needs:

- The project is based on a community process.
- Implementation of the transit Village has been hampered by the complexity of the project and the enormity of the vision. This has held back major progress on the project.
- The Unity Council risks becoming a 'victim of its own success' as improvements drive up property values and increase taxes. FDC's response has been to initiate a Homeownership Program that involves buying, rehabbing and selling homes at affordable prices to help stabilize the community.

4. Moffett Park, Sunnyvale

Developer:	Jay Paul Company
Jurisdiction:	City of Sunnyvale
Transit Agency:	Santa Clara Valley Transportation Authority (VTA)
Transit Service:	Future Tasman West Light Rail Line Station

Jay Paul Company

View north from the future light rail station. A TOD design allowed a density increase from 35 to 56 percent for the high tech office building

Moffett Park has been leveraged by the developer's ability to build bigger buildings with a TOD design. In addition, the original proposed plan changed from office buildings surrounded by large parking lots to one in which buildings are clustered along a walkway leading to the new Tasman West light rail line immediately adjacent to the property.

In order to qualify for a 60 percent increase in the allowable floor area ratio (FAR), the developer submitted a revised design. According to the City of Sunnyvale's staff report: "Elements supporting the FAR increase include the provision of public art, more than minimum landscaping, on-site amenities such as the fitness center, restaurant, bicycle facilities, and plazas, construction of the new light rail station, excellent design, and use of high quality materials."

The developer approached the transit agency, the Santa Clara Valley Transit Authority (VTA), and offered to pay the full cost of constructing a new station to serve the site (estimated at

Jay Paul Company

A pedestrian "spine" leads to the new privately-financed light rail station.

$2.5 million). The developer was given two years after occupancy permits were issued for the office buildings in which to complete the transit station.

The City staff report states: "Construction of a light rail station is a unique and unprecedented measure to encourage alternative transportation use. A conceptual plan has been reviewed and approved by the City and the Valley Transportation Authority. Staff supports inclusion of this feature, but recommends a condition of approval that station construction be completed within two years of project occupancy."

"Historically only three percent of employees in this region have used public transit. Staff believes that provision of a light rail transit station can provide sufficient incentives so that future ridership levels will increase."

Parking
Sunnyvale's standard parking requirement for an Industrial/R&D Office zone is one parking place per 25 to 500 square feet of interior floor area. As part of the TOD design, and in support of the city's transportation demand management goals, the developer agreed to a parking ratio at the lower end of the range.

Lessons Learned
Moffett Park is a good example of a local jurisdiction's incentive-based policy leveraging a TOD design:

- The developer wanted the increased density and was willing to take significant steps to achieve that goal.
- The site design integrates a pedestrian spine oriented to transit and a conventional office campus.
- Moffett Park demonstrates the value of efforts to reduce the rate of vehicle travel associated with new developments.

However, the site configuration appears to focus on 'private' (on-site) use of the station. It would have been better to have a public street and sidewalk between the station and the project buildings.

Parsons Brinckerhoff and the CA Dept. of Transportation

A new station on the Tasman West light rail line will connect to this walkway. The parking ratios for the project reflect a transportation demand management goal of reducing trips by 15 percent.

5. Ohlone-Chynoweth, San Jose

Developer:	Eden Housing
Jurisdiction:	City of San Jose
Transit Agency:	Santa Clara Valley Transportation Authority (VTA)
Transit Service:	Light rail 10-minute frequency

Parsons Brinckerhoff and the CA Department of Transportation

Ohlone-Chynoweth is a precedent-setting project that redeveloped a park-and-ride lot into housing, including these units developed by Eden Housing.

Ohlone-Chynoweth includes housing and community facilities developed on an under-used light rail park-and-ride lot. For this project, VTA issued a request for proposal seeking a developer for the 7.3-acre site.

The former 1,100-space park-and-ride lot now includes a variety of uses: 240 park-and-ride spaces, 330 units of affordable housing, 4,400 sq. ft. of retail, and a day care center. At 27 dwelling units per acre, the residential density is relatively high compared to the predominantly single family neighborhood surrounding it.

Although the City used an expedited process for application review, the number and type of issues raised by six homeowner associations in the area resulted in the City Council deferring decisions several times.

An earlier project adjacent to the site has 135 units of affordable housing built by Bridge Housing. With the Eden proposal of 195 units, the neighbors were concerned about a total of 330 units of affordable housing in one area. After several meetings, the City Council approved the project and determined that the community will benefit from the additional housing, day care center and the retail uses.

Parsons Brinckerhoff and the CA Department of Transportation

The 1,100 space park-and-ride lot was redeveloped into 330 units of affordable housing, retail, childcare and a 240 space park-and-ride lot.

Parsons Brinckerhoff and the California Dept. Transportation

The retail element of this TOD would benefit from better visibility from the street.

Project Financing
The $31.9 million project included $14.5 million in tax-exempt bonds, $10.5 million in tax credit equity, a $5.2 million loan from the City to support affordable housing, $824,000 in Federal transportation funds for improvements, a $500,000 Affordable Housing grant, and $350,000 State Proposition 1 funds to reimburse the school fee.

Lack of TOD experience within VTA, at the time and few prototypes of similar projects required proponents to work hard to convince major stakeholders, such as bankers, to support the project.

Lessons Learned
VTA staff faced the challenge of having no "TOD institutional memory" because staff that learned from previous experience developing a transit village were no longer with the company or agency when the next TOD was proposed.

Working out issues with the homeowner associations and the school district helped City staff discover a process that will facilitate future projects.

What would you do differently?
VTA staff offered the following observations on the implementation and design of the TOD:

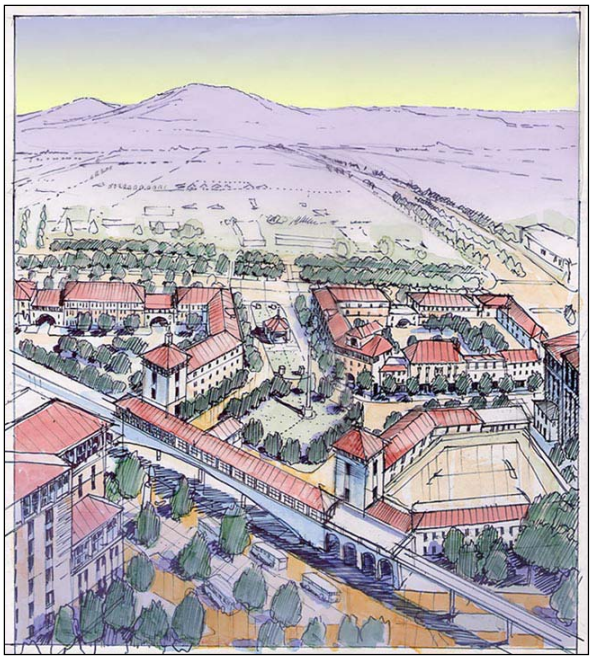
- Pay more attention to the program aspect of the project to ensure success of the retail, childcare center and computer space. For example, identify local businesses that would be particularly appropriate for the TOD and then offer them reduced rent for a period of time to assist them in getting established.
- Place small retail spaces along the street, rather than at a single node at the station. This can encourage the larger neighborhood to patronize the businesses. As it is, the retail component is somewhat isolated.
- Design pathways to provide direct connections to nearby neighborhoods. In this case, residents of the adjacent single-family neighborhood must use an indirect path around the parking lot, which does not encourage them to use the station or patronize the retail stores.
- Hold meetings with the homeowners associations early in the process. Arrange to meet with representatives of all affected groups at the same time.

6. Pleasant Hill Bart Station Area

Developer:	Millennium Partners (New York)
Jurisdiction/Urban Renewal Agency:	Contra Costa County Redevelopment
Transit Agency:	Bay Area Rapid Transit (BART)
Transit Service:	BART: 10-15 minute frequency

The Pleasant Hill BART station area is one of the earliest examples of suburban transit-oriented development in the United States. TOD planning for the Pleasant Hill BART station is now entering its second phase, following the initial Specific Area Plan that was developed in the 1980s.

In 1995, working with the County Redevelopment Agency, BART researched market interest in turning its 18-acre surface parking lot into a TOD. Millennium Partners was subsequently selected through a request for proposal process.



Lennertz and Coyle Associates/Seth Harry

Proposed Master Plan for redevelopment of BART's parking lot into a TOD.

A charter planning process was held this year to identify what the community would support. As of March 2001, the draft project proposal includes: 411,000 square feet of office space, up to 345 apartments and townhouses, up to 50 for-sale units, a town square and community green, a child care facility and about 40,000 square feet of ground floor retail and restaurants.

At build-out, Pleasant Hill will continue to be an employment center. Neighborhood groups have expressed that they do not want it to be a commercial/retail destination, however. An earlier proposal would have created an entertainment attraction that would have brought transit riders in during off-peak times on a reverse commute. After two years of controversy, the multiplex entertainment center part of the project was dropped.
BART, the County and the Redevelopment Agency continue to work together to build community support for this TOD.

Parking
Commuter parking for the station remains at capacity, as BART ridership is drawn from a wide area. To recover the 1,477 surface parking spaces that BART will lose by leasing its land for new transit-oriented development, replacement parking will be provided in a new

garage. Private parking for residential and commercial uses will be provided within those buildings.[LXIV]

As part of the TOD, the County Redevelopment Agency would finance the replacement of BART parking, as well as assisting with providing other public facilities and affordable housing. Subject to negotiations, the Redevelopment Agency would be a partner with BART in a long-term ground lease, and would receive a proportionate share of revenues from new development.

In the Pleasant Hill Specific Plan, requirements for parking are reduced below the County standard rates as follows:

- for offices, from five spaces per 1000 sq. ft. of interior space, to 3.3 spaces;
- for retail uses, from five spaces per 1000 sq. ft., to four spaces; and
- for residential units, from 1.75 parking spaces per housing unit to 1.35 spaces.

Lessons Learned
Staff involved with the Pleasant Hill project offer these lessons:

- Developing a TOD is a long process, particularly in an infill setting. It is important to formalize agreements while the people who adopted the plan are still in decision-making roles.
- Having a strong community process from the beginning, including people throughout the region representing broader interests, is critical.
- The County's political and financial support is critical to project development.
- The importance of a determined political advocate who is persistent in working to achieve community consensus cannot be overstated.

Lennertz and Coyle Associates / Seth Harry

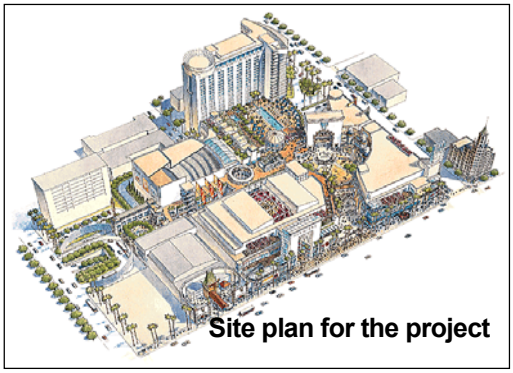
BART's parking lot may be transformed into offices, housing and a community park

[LXIV] Additional information on parking at this TOD is provided in a special report titled *Parking and TOD: Challenges and Opportunities.*

Southern California:

7. Hollywood/Highland, Los Angeles

Developer:	TrizecHahn Centers
Urban Renewal Agency:	L. A. Community Redevelopment Agency (CRA)
Transit Agency:	Los Angeles Metropolitan Transit Authority (MTA)
Transit Service:	Metro Red Line; 10-minute frequency



Site plan for the project

The newly constructed Hollywood/Highland project is located above the Metro Red Line subway station at the intersection of Hollywood Blvd. and Highland Ave. in Los Angeles. To jump-start this impressive project, a request for proposal (RFP) was issued jointly by the Los Angeles Community Redevelopment Agency (CRA) and the Los Angeles Metropolitan Transit Authority (MTA).

The complex combines 1.3 million square feet of specialty retail, multiplex theaters, restaurants, a 640-room Renaissance Hotel, the restored Graumann's Chinese Theatre, a 3,000 space underground parking structure, plus the Kodak Theatre – the new permanent home for the Academy Awards.

The subway station and the complex were under construction simultaneously. The transit station was completed and service began in June 2000. The TOD was completed in November 2001.

TrizecHahn holds a land lease for up to 99 years, and owns and operates the retail projects. The City of Los Angeles owns and operates the theater and parking structure, and the MTA owns and operates the station and transit facilities.

TrizecHahn Ehrenkrantz Eckstut & Kuhn Architects

The new home for the Academy Awards anchors this $560m major mixed-use TOD built on top of the Red Line Hollywood, Highland subway station.

The TOD has increased the land use mix, density and employment of the area. It is in an important location and has already become a major destination/ attraction. Due to increasing ridership, the Red Line has six-car trains at peak periods.

TrizecHahn Ehrenkrantz Eckstut & Kuhn Architects

Hollywood & Highland will generate significant tourist ridership. The station opens onto the "Hollywood Walk of Fame".

Project Financing and Public Agency Participation

Simultaneously constructing the TOD and the Red Line station presented major coordination challenges. Apart from normal underwriting issues (e.g., lease requirements), the developer believed there were no significant problems arranging financing for the project.

The City of Los Angeles financed the garage and the theatre through two separate bond offerings. An $81 million bond for parking structures is to be repaid from parking fees, business license fees, the transient occupancy tax for the project, and $20 million in developer equity.

The development results from the assembly of eight separately-owned parcels, only one of which (50,000 square feet of land) was owned by MTA. This parcel is provided on a long-term lease for 60 years with four 10-year extensions.

Lessons Learned

- The subway system will benefit from ridership associated with this project.

- This TOD demonstrates the need to start transit-supportive development planning early so the designs and schedules of the transit facilities and land use development fit together. In this case, MTA started construction following a design that did not lend itself well to the addition of a large structure on the street level. Also, a "fast track design" process caused subsequent construction problems.

- This project heightened awareness of the need to have seasoned construction managers involved early in negotiations and schedule coordination. Fortunately, a construction manager with significant experience and credibility represented MTA, who was able to respond to demands to speed up transit station completion.

8. Pacific Court, Long Beach

Developer:	The Janss Company [sold project in 2000]
New Owner:	Meruelo Enterprises
Jurisdiction:	City of Long Beach
Urban Renewal Agency:	Long Beach Redevelopment Agency
Transit Agency:	L..A. County Metropolitan Transit Authority (MTA)
Transit Service:	Blue Line Light Rail & Bus; 15-minute frequency

Parsons Brinckerhoff and the California Department of Transportation

Pacific Court includes 142 apartments over retail and a multiplex theatre.

Pacific Court is a heavily subsidized mixed-use transit village put together by the Long Beach Redevelopment Agency. The 2.1-acre project is located in downtown Long Beach near the western terminus of MTA's "Blue Line" light rail.

The residential component includes a mix of 142 affordable and market rate apartments located above 96,000 square feet of retail, including a 16-plex-movie theatre. Smaller shops ring an open-air, interior courtyard.

Project Financing

The Long Beach Redevelopment Agency assembled land for the project, and leased the property to the Janss Company. It also provided short-term 'gap financing' to facilitate construction, which was completed in December 1992 ($25 million in Multifamily Housing Bonds, $7 million of which were tax exempt, and $13.6 million in Community Facility District Bonds issued by the City to be repaid from project revenues).

Parsons Brinckerhoff and the CA Department of Transportation

According to surveys, 10 percent of Pacific Court's residents use transit. A MTA Blue Line light rail station is within a block.

This transit-supportive development increased housing, land use mix, and density in the area. It also added 300 jobs in the short-term, but given an increasing retail vacancy rate in the project, it is unclear how many of these jobs still exist.

Parking
The project includes 430 parking spaces, 263 for the public and 167 for residents. Parking for the project is fairly conventional – approximately one space per bedroom for residences and 5 spaces per 1000 square feet of retail.

Through a variance, guest parking was reduced to 3 spaces for every 10 units because of the project's high level of access to transit. According to surveys, 10 percent of Pacific Court's residents use transit. An MTA Blue Line light rail station is within a block.

Market Performance
The mix of affordable and market rate housing has proven to be problematic. As of July 2001, all residential units are now market-rate.

Design problems and limited visibility between the retail shops and the theater have also hurt the performance of the retail portion of the project. Retailers say the design does not encourage pedestrians to view the shops on the way to the theater, and as a result, retail vacancies have been high. In addition, the theater itself is no longer "state of the art" and therefore is drawing fewer patrons.

According to some observers, the high level of retail vacancies may have helped push the project into foreclosure. In 1993, the full cost of the project was listed at $53 million. The Janss Company experienced financial difficulties with Pacific Court and other projects that culminated in bankruptcy. After foreclosure and emerging from bankruptcy, Janss sold the project for $13.5 million.

Parsons Brinckerhoff and the California Department of Transportation

Visitor parking was reduced to take advantage of transit availability.

9. 'NoHo' (North Hollywood) Arts District, Los Angeles

Developer:	Los Angeles Neighborhood Initiative (LANI) North Hollywood Community Forum
Jurisdiction:	Los Angeles
Urban Renewal Agency:	L.A. Community Redevelopment Agency (CRA)
Transit Agency:	L.A. County Metropolitan Transit Authority (MTA)
Transit Service:	4 bus lines, 20- to 40-minute frequency

LANI

Parsons Brinckerhoff and the CA Department of Transportation

The NoHo (North Hollywood) bus TOD has promoted economic development, increased pedestrian activity, and improved the general attractiveness of the area

The 'NoHo' bus-oriented development resulted from a community partnership, with the Los Angeles Neighborhood Initiative (LANI) assisting in the formation of a community-based organization that was responsible for planning the improvements. Later, the nonprofit North Hollywood Community Forum was formed to continue promoting projects in the area.

The Los Angeles Community Redevelopment Agency owned the vacant lot that became an art park, and leased the property to the North Hollywood Community Forum for one dollar a year. The art park and surrounding small businesses have created an attractive area that is now a much greater draw for local residents than previously.

Parsons Brinckerhoff and the CA Department of Transportation

Pedestrian plaza

The economic development leveraged by this project has encouraged businesses to fill previously vacant commercial spaces. Eight new businesses have moved into the immediate vicinity of the art park. One vacant property has become a Starbuck's Coffee shop, and other vacant buildings are now occupied by small businesses.

LANI estimates that pedestrian foot traffic in the area has increased significantly, particularly in the evenings. At least 30 new jobs have been created in the NoHo Arts District. The NoHo project has installed a parking lot across the street from the Arts Park.

Project Financing
Funding for $100,000 of transit amenities came from a Federal Transit Administration *Livable Communities* grant.

Lessons Learned
The NoHo bus transit village reveals more about community development than transit, and illustrates how one of the greatest powers of TOD is to serve as a catalyst to achieve a community's vision. Key ingredients were:

While LANI contributed seed money, it encouraged residents to make decisions as to how the funds would build capacity in the community.

- Giving community groups some control over the funds to be used in their neighborhood promoted ongoing public involvement.

NoHo is an example of how a single, well-focused project can have greater visibility than a series of changes along a corridor. It also demonstrates how short-term impacts can stimulate longer-term development in a community.

Parsons Brinckerhoff and the CA Department of Transportation

After creation of the art park, this restaurant created a new opening in a wall to serve outdoor diners.

San Diego:

10. American Plaza, San Diego

Original Developer:	Starboard Development Corporation (No longer in business)
Current Owner:	Shimizu Land Corporation
Jurisdiction:	City of San Diego
Redevelopment Agency:	Centre City Development Corporation
Transit Agency:	Metropolitan Transit Development Board (MTDB); Amtrak (train station nearby)
Transit Service:	10-minute light rail service

Parsons Brinckerhoff and Calif. Dept. of Transportation

The American Plaza light rail station is incorporated into the structure of one of San Diego's tallest buildings.

The Metropolitan Transit Development Board (MTDB) contributed $1.2 million to the project and the City and Redevelopment Agency vacated and contributed the site, including the street between the two blocks. All other costs, including on and off-site utility and other public improvement costs, were borne by the developer.

This two-block transit-oriented development includes one of two commercial towers in San Diego that are distinguished by having a light rail stop built directly into their structures.

Starboard Development Corporation financed the office building and nearly four-fifths of the $5.2 million capital costs for the station. The developer spent $3.78 million to temporarily relocate light rail tracks, construct the new station, and connect the C Street light rail alignment to the Broadway alignment.

Project planning began in 1987, and the structure was built in conjunction with the new Broadway-Kettner station. To meet MTDB's light rail construction schedule, the station had to be built by January 1, 1992. The developer beat the deadline by six weeks, completing the station on November 14, 1991.

Shortly after construction began, the primary lender (a savings and loan – S&L - and prospective anchor tenant) collapsed and new financing had to be found. Meanwhile, the project schedule was being driven by the need to complete the light rail track in time to connect to new service on the other side of the site.

Parsons Brinckerhoff and Calif. Dept. of Transportation

The light rail station is completely within American Plaza.

While construction continued, financial arrangements were made that resulted in a Japanese bank buying out the original S&L and supporting the project.

The 34-story tower opened in 1992, and is one of the tallest buildings in the city. The 555,000 square foot "vertical TOD" includes offices, a specialty retail galleria/food court (17,000 square feet), and the San Diego Museum of Contemporary Art (10,000 square feet).

Parking and Transit
American Plaza has 1,250 parking spaces in four levels under the building. The parking ratio of 2.2 spaces per 1,000 square feet of office is transit-friendly, however adjacent surface parking is available.

No ridership estimates are available for the project, however approximately 25 percent of all San Diego downtown workers use rail transit during peak commuting hours. The ground floor retail, 33 floors of office space and the museum all contribute to transit patronage. In addition, the outstanding station design provides transit patrons with a unique waiting area, and has become an attractive destination and attraction.

Lessons Learned
The American Plaza project presented major challenges regarding schedule deadlines and overcoming the bankruptcy of the lender. According to MTDB, success resulted from:

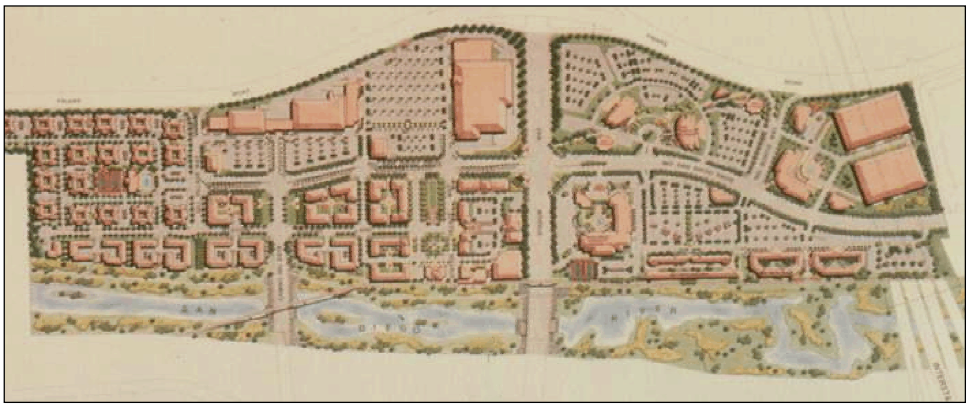
Parsons Brinckerhoff and the California Department of Transportation

Coaster Commuter rail, Amtrak and light rail service is available next door at the historic Santa Fe Station.

- Choosing the best team to develop a project concept, rather than letting the concept drive the selection.
- Setting a "fair" project budget and schedule with allowance for changes.
- Controlling the schedule through agreements.
- Having an "ironclad" delivery date.

11. Rio Vista West, San Diego

Developers:	CalMat Co., site planner, Greystone Development Company
Jurisdiction:	City of San Diego
Transit Agency:	Metropolitan Transit Development Board (MTDB)
Transit Service:	Mission Valley Light Rail; 15-minute frequency



CalMat Co., image created by Peter Calthorpe Associates

The Rio Vista Master Plan includes a mix of auto-oriented and transit-oriented uses on a 95-acre parcel in Mission Valley.

Rio Vista West is a mixed-use transit village being built in phases on 95 acres near the Rio Vista light rail station. The City of San Diego's 1985 Mission Valley Plan designated multiple urban nodes and envisioned higher-density for this area.

Rio Vista West's first phase was a fairly standard shopping center. The first residential development in this area was located one-quarter mile from the station. These units are in three-story structures at blended densities of 33 units per acre, well above the typical densities found in the surrounding suburbs which average 4 to 5 units per acre.

The second residential phase of 240 condominium units broke ground in quick succession.

Construction is now underway on the final residential portion immediately next to the station. The 1,000-unit project at a density of approximately 70 units per acre is estimated for completion in 2002. The residential units are over ground-floor retail stores.

The portion of the TOD near the light rail station includes 30,000 to 50,000 square feet of small office and neighborhood retail. There is minimal street parking near the office/retail uses because of the availability of transit, and much of the parking is underground.

Parsons Brinckerhoff and the CA Department of Transportation

The Rio Vista TOD includes conventional retail; the first phase of residential is at the end of this road.

TOD Policies and Programs

In 1990, MTDB adopted a policy on land use coordination that calls for working closely with other agencies on pedestrian and transit-oriented developments. The City of San Diego's TOD design guidelines were adopted in 1992 and incorporated into official policies and regulations.

San Diego does not provide density bonuses for transit-supportive development, but does zone for higher densities around transit stations. The City zoning code allows mixed-uses in most commercial areas.

The City encouraged the developer to follow guidelines, and received a design that met most of the objectives of the City. No subsidies were involved in this TOD; the project was privately financed and market driven.

Lessons Learned

Rio Vista is an important example of the challenges and opportunities with a phased TOD project. Some observers were skeptical about early development phases of the project because of their automobile orientation. However, the most recent phase - the higher-density residential portion - holds the promise of being one of the most transit-friendly suburban projects in California.

Major lessons from this project include:

- Providing a TOD-friendly master plan can facilitate quality development.
- Having a motivated developer who is committed to the project for the long-term is important.
- The importance of being persistent and pursuing quality TOD design.

Parsons Brinckerhoff and the CA Department of Transportation

The first phase of apartments is beyond an easy walk to the light rail stop; 1,000 new apartments are under construction immediately adjacent to the station.

12. Uptown District, San Diego

Developer:	Oliver McMillan / Oldmark & Thelan
Jurisdiction:	City of San Diego
Transit Agency:	Metropolitan Transit Development Board (MTDB)
Transit Service:	5 bus routes, 15-minute frequency

The Uptown district is a 14-acre mixed-use bus-oriented development that was put together under the leadership of the City of San Diego. For this project, San Diego wanted to showcase a mixed-use development. There was no public opposition to the project since it required relatively little change to the community (the site was a former Sears store in an existing mixed-use community).

Parsons Brinckerhoff and the CA Department of Transportation

Ralph's Grocery viewed from second level offices with an outdoor café below.

The City issued a request for proposal soliciting developers for the project in 1987, and the project was completed in 1989. The residential component has 320 units at an average density of 43 units per 'net acre'[LXV] and 145,000 square feet of retail and commercial space, including a 42,500 square foot supermarket.

Parsons Brinckerhoff and the CA Department of Transportation

These gated condominiums face onto landscaped courtyards.

TOD Policies and Programs

In 1990, the San Diego Metropolitan Transit Development Board (MTDB) adopted a policy on land use coordination that promotes working closely with other agencies regarding pedestrian and transit-oriented developments.

The City of San Diego adopted TOD design guidelines in 1992 (after project completion), which were incorporated into official policies and regulations. San Diego does not provide density bonuses, but does zone for higher densities around transit stations. City zoning code allows mixed-uses in most commercial areas.

[LXV] A 'net acre' is a portion of land that is available for development, and does not include open space or roads.

Transit ridership in the area was strong before the project was built, and increased after project construction (requiring additional bus service). Many residents walk to nearby bus stops.

Parsons Brinckerhoff and the CA Dept. of Transportation

A pedestrian arcade connects a bus stop on University Avenue to the core of the neighborhood.

The Uptown project was funded by the City redevelopment agency and by private companies. It has been successful in creating a higher-density community where it is convenient to walk to shopping and access to bus transit service is good.

Parking

No special parking reductions were implemented to account for the presence of transit. The parking ratio for commercial development in San Diego is one space per 285 square feet and 2.25 spaces per unit for the condominiums. The developer chose to construct more parking spaces than the City recommended in its solicitation.

Residential and supermarket parking is located underground, and street level spaces are also available for retail shoppers. No parking is provided specifically for bus riders.

Lessons Learned

With strong city leadership, a bus TOD became an important community asset. Like other transit-supportive developments, the residential portion is more successful than the retail. For this project, public land ownership was important, because the City could wait for a quality design to be proposed before allowing development.

Uptown is a good example of how to accommodate the needs of the automobile *and* create a well-designed, pedestrian-friendly mixed-use transit-oriented development.

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The Uptown neighborhood has an extensive network of inviting pedestrian walkways and plazas.